**TITLE 326 AIR POLLUTION CONTROL BOARD**

**LSA Document #01-251**

**SUMMARY/RESPONSE TO COMMENTS RECEIVED AT THE FIRST PUBLIC HEARING**

On February 6, 2002, the air pollution control board (board) conducted the first public hearing/board meeting concerning the development of amendments to compliance methods at 326 IAC 8-1-2 applicable to dip or flow operations at miscellaneous metal coating operations regulated at 326 IAC 8-2-9. Comments were made by the following parties:

Monaco Coach (MC)

Following is a summary of the comments received and IDEM's responses thereto.

*Comment:* With the way the rule is currently drafted a source wishing to use a dip tank would have to find a coating that is significantly below the limitations that EPA and IDEM's rules specify for metal coatings, which is 3.5 pounds of VOC per gallon of material. For example, a source would have to use a coating that is 3 to 2.8 pounds of VOC per gallon of coating. The technology does not support finding a lower VOC containing coating easily or cheaply. (MC)

*Response:* The requirement to use a coating containing less than the allowable VOC content only applies if a source adds thinner to the tank. Averaging always requires that the use of solvents or coatings that would result in a violation be offset by coatings that are better than compliant. The extent that a coating must exceed the limit is case specific and depends on a number of factors. IDEM is considering two alternative averaging methods that would allow sources to more readily confirm compliance using averaging. These two options are 30-day rolling average and determination of the tank VOC content each time solvent is added.

IDEM disagrees that the technology does not exist to support finding a lower VOC containing coating easily or cheaply. In a Connecticut case study, cited at dep.state.ct.us/west/p2/p2casest/okay.html. OKAY Industries of New Britain, Connecticut worked with a supplier to create a new water-borne formula and dip process coating line to replace high VOC containing coatings applied with a standard air powered spray gun. The new water-borne formula and dip process coating had to give consistent coverage, dry quickly with under 2.0 pounds of VOCs per gallon, meet military performance requirements and be approveable by the military. OKAY reported that the investment to change over to the new process had a payback period of approximately six (6) months. IDEM believes that similar opportunities to use lower VOC content coatings or water-borne coatings in dip operations exist in Indiana.

*Comment:* The baseline transfer efficiencies under 326 IAC 8-1-2(a)(9)(C) specify sixty percent (60%) transfer efficiency. The baseline transfer efficiencies should be changed to reflect a realistic value. For example, parts that would typically be coated in a dip tank and that don't easily lend themselves to spray operations may have only a fifteen percent (15%) transfer efficiency using a spray operation. We request that the baseline transfer efficiencies be fixed to reflect the reality of what the transfer efficiencies would be and in only the very best cases are those transfer efficiencies at sixty percent (60%).(MC)

*Response:* In the original model VOC rules, U.S. EPA used a sixty percent (60%) baseline transfer efficiency to establish reasonably available control technology (RACT) limits. The limits in this rule are RACT limits. In 326 IAC 8-1, the baseline transfer efficiency is used only for calculating the equivalent emissions limitations specified in the rule. It cannot be changed. Additionally, modifying the baseline transfer efficiency would not help companies to achieve compliance because the rule requires compliance with the equivalent emissions limitations based on an actual measured transfer efficiency. The actual measured baseline transfer efficiency is source specific and must be determined using a method that is either specified by U.S. EPA or is submitted to and approved by U.S. EPA as a revision to the state implementation plan (SIP).

*Comment:* The technology that we're using is at 3.5 pounds of VOC per gallon of material and meets the existing rule. We certified compliance based on viscosity reading. As long as the paint viscosity does not go above the original formulated viscosity, you are in compliance. EPA has since disagreed with viscosity as a compliance method. Now in order to demonstrate compliance we must start out with something that is significantly lower than 3.5 pounds of VOC per gallon of material. This causes a couple of issues. First, acetone, which is a common non-VOC product, does not work because it evaporates too quickly and is noneffective for dip coating. Second, adding chlorinated solvents to the dip tank creates a lot of hazardous waste issues, along with higher costs. (MC)

*Response:* The commenter is correct that to certify compliance under the averaging method in the draft rule you have to start out with a coating that is better than compliance (lower than 3.5). However, offsetting thinner additions with lower VOC content coatings is the standard acceptable compliance option for any coating applications system, not just dip coating. IDEM understands that solvents that have lower VOC contents may cause quality control problems, hazardous waste disposal issues, evaporation problems or higher costs. However coatings and solvents may exist that do not pose these problems and the greater transfer efficiency obtained by dip or flow coating can often offset these problems. IDEM agrees that viscosity is an acceptable way to determine compliance, however, U.S. EPA has raised concerns about viscosity as a compliance option because solvent evaporation losses from the tank are not included in determining compliance.

At the first public hearing, the Air Pollution Control Board directed IDEM staff to further pursue using viscosity as an alternative compliance method. IDEM staff will work with U.S. EPA to attempt to provide sources a viscosity compliance option that is acceptable to U.S. EPA.